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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/521,074	03/07/2000	Anthony S. Camarota		9150

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EXAMINER

ANTHONY, JOSEPH DAVID

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 01/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/521,074

Applicant(s)

Examiner

Group Art Unit

1714

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

☒ Responsive to communication(s) filed on 10/25/02 AS Amendment A.

☒ This action is **FINAL**.

- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 111; 453 O.G. 213.

## Disposition of Claims

☒ Claim(s) 1-6 AND 12 is/are pending in the application.

Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-6 AND 12 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
  - ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 1714

## **FINAL REJECTION**

### ***Election/Restriction***

1. The restriction is made Final. It is also noted that non-elected claims 7-11 have been canceled.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-6 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite in regards to the metes and bounds of the concentration ranges for the various components since various components can overlap each other in function. As an example, the "heat activated halogen material" can also function as a "heat activated blowing agent" as well as a "carbonific material", see page 7, line 15 to page 8, line 3. As another example, the "heat activated blowing agent" can function as a "carbonific material".

Art Unit: 1714

Claim 1 is indefinite because in line 10 of the claim the listed concentration range of 23.5.0-29.5% does not make sense. It is deemed that applicant meant to claim --23.5-29.5%--.

Claim 12 is indefinite because the claim uses improper markush claim language to define the individual components. Proper markush claim language is --selected from the group consisting of--. The last members of the markush grouping needs to be separated by an --and-- and not by "or".

Claim 12 is indefinite because it is deemed that the number "19.0" should be the number --17.0-- instead.

Claims 3-6 are being rejected here because they contain all the limitations of the dependent claim(s) from which they depend, and these said dependent claims are rejected for the reasons given above.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vajs et al. U.S. Patent Number 4,743,625 or Wortmann et al. U.S. Patent Number 4,166,743.

Art Unit: 1714

Vajs et al and Wortmann et al both disclose powder intumescent fire retardant mixtures that comprise: 1) a carbonific material, such as pentaerythritol, 2) a heat activated blowing agent, such as dicyandiamide, 3) a phosphorous material, such as ammonium polyphosphate or monoammonium or diammonium phosphate, 4) chlorinated paraffin, 5) inorganic binders, such as vitrifying materials, see column 4, lines 43-50 and claims 7-14 of Vajs et al., and column 2, lines 26-38 and examples 1-5, 7, and 9 of Wortmann et al..

Vajs et al and Wortmann et al both differ from applicant's claimed invention in that there is no direct teaching (i.e. by way of an example) to an intumescent powder mixture that actually comprises all of applicant's claimed components within applicant's claimed concentration ranges.

It would have been obvious to one having ordinary skill in the art to use the individual disclosures of Vajs et al and Wortmann et al as motivation to actually make intumescent powder mixtures that contain all of applicant's claimed components that are within applicant's claimed concentration ranges. This is obvious because applicant's claimed concentration ranges are deemed to fall within the individual broad disclosures of the components as set forth in the Vajs et al and Wortmann et al patents. In any case, it is well established by the courts that where the general conditions of the claims are disclosed in the prior-art, it is not inventive to discover optimum or workable ranges (i.e concentration, temperature, pH etc.) by routine experimentation, absent evidence of unexpected results.

Art Unit: 1714

*Response to Arguments*

6. Applicant's arguments filed 10/25/02 with amendment A have been fully considered but are not deemed to place the application in condition for allowance for the reasons set forth above. Additional examiner's comments are found below.

Applicant's arguments on pages 6-8 in the REMARKS section of Amendment A, against the Examiner's position that claim 1 is indefinite in regards to the metes and bounds of the concentration ranges for the various components since various components can overlap each other in function is deemed to be very unpersuasive. Applicant's remarks not only show a lack of understanding of the intumescent art they are also in direct conflict with applicant's own specification! On page 7, lines 22-26 of applicant's specification applicant states: "The halogen containing material serves several functions. It acts as a carbonific, a blowing agent and a fire snuffing agent. On exposure to heat it is reduced to a char (carbonific) liberating halogen gas (blowing agent) which combines with or scavenges free-radicals generated during rapid oxidation, thus aiding in the extinguishing of flames (fire snuffing agent)."

On pages 9-20 of the REMARKS section of Amendment A applicant attempts to argue persuasively against the applied prior-art rejections. Unfortunately applicant's arguments fall way short of being persuasive. A main arguments of applicant's is that applicant asserts that neither Vajs et al or Wortmann et al disclosure the use of inorganic binders. This assertion of applicant is clearly false. Applicant's attention is drawn to column 3, lines 36-49 of Vajs et al. which clearly teaches inorganic vitrifying materials that overlap applicant's claimed binder materials as set forth

Art Unit: 1714

on page 8, line 21 to page 9, line 4 of applicant's specification. As an example applicant's disclosed silica flour inorganic binder reads on Vajs et al's silica powder vitrifying agent. Vajs et al's vitrifying agents clearly perform a binding function. Furthermore, those filler materials which are inorganic, as set forth in column 2, line 66 to column 3, line 5 of Wortmann et al are deemed to encompass applicant's claimed inorganic binder materials.

Applicant's further argues that Wortmann et al. is not properly applied against applicant's claims since Wortmann et al. is "non analogous art" because the patent teaches "liquid" compositions. This assertion of applicant's is totally rejected by the examiner because such is clearly false. Applicant's attention is drawn to the Examples of Wortmann et al.. It can clearly be seen that prior to admixing the intumescent flame retardant composition with the oily resin the Wortmann et al intumescent composition is in powdered form! Applicant's invention is no different in this respect in that applicant's powdered intumescent composition is disclosed to be subsequently admixed with a resin material, which can be in liquid form prior to curing, see canceled claims 7-10 and the specification as a whole.

Finally, applicant argues against the combination of Vajs et al and Wortmann et al.. These arguments of applicant's are deemed to be moot since the examiner never made a prior-art rejection over such a combination. Applicant's attention is drawn to the heading of the prior-art rejection made in section 5 above which states: "Claims 1-6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vajs et al. U.S. Patent Number 4,743,625 or Wortmann et al. U.S. Patent Number 4,166,743." [emphasis added].

Art Unit: 1714

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

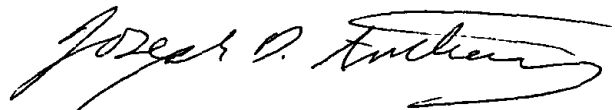
***Examiner Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Joseph D. Anthony whose telephone number is (703) 308-0446. This examiner can normally be reached on Monday through Thursday from 7:35 a.m. to 6:00 p.m. in the eastern time zone. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The group (**non-after final**) FAX machine number is (703) 872-9310. The group (**after final**) FAX machine number is (703)



Art Unit: 1714

872-9311. Unofficial correspondence transmitted by FAX must be marked "DRAFT". All other papers received by FAX will be treated as Official communications and cannot be immediately handled by the Examiner. Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0651. The receptionist is located on the 8<sup>th</sup> floor of Crystal Plaza 3 (e.g. CP-3) and will be the welcome point for all visitors to the building.



**Joseph D. Anthony**  
**Primary Patent Examiner**  
**Art Unit 1714**

1/12/03